



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,493	02/19/2002	Wataru Yamamoto	Q68543	1372

23373 7590 02/24/2003

SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
WASHINGTON, DC 20037

EXAMINER
----------

PALADINI, ALBERT WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 02/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/076,493

Examiner

Albert W Paladini

Applicant(s)

YAMAMOTO, WATARU

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donne (6486410) in view of pages 148-152 of Systems Engineering Tools by Chestnut.

Donne discloses an electroplating experiment management apparatus in figures 1-3 which can evaluate electrochemical deposition processes, electrolytic processes, and electrochemical cell performances. On lines 47-51, column 10, Donne states "A series of experiments were conducted in an array format to investigate three of the four basic parameters that influence electrolytic manganese dioxide (EMD) synthesis. The effects of current density, manganese sulfate concentration and sulfuric acid concentration were evaluated." In figures 4-6 Donne depicts graphs comparing experimental values and predicted values. Donne does not utilize the computer for performing the measurements and evaluations as recited in claims 1 and 2.

In figure 4.1-3 of Systems Engineering Tools on page 149, Chestnut discloses a computer for process control where the computer controls actuators for inputting experimental conditions, and sensors are attached to the output of the process for obtaining experimental data resulting from the input conditions.

In order to obtain real time accurate results, It would have been obvious to one of ordinary skill in the art to utilize a computer system as taught by Chestnut to control the electroplating system disclosed by Donne and perform the associated comparative analysis of predicted results with experimental results. Although the preambles of the claims recite an electroplating experiment, the body of the claims is not functionally or structurally linked to an electroplating experiment, so that numerous other experimental experiment management systems would have been sufficient to reject the claims.

It must be also noted that the techniques of developing deterministic or probabilistic models for prediction of physical phenomena and using statistical tools such as chi square distributions or statistical process control charts to compare predicted data with experimental or measurement data utilizing computers are also commonly used in laboratories and manufacturing environments.

### ***Relevant Prior Art***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hasenberg (5841678) discloses computer system and ARDS algorithm for modeling and simulating a hydrotreating reactor. The computer compares the ARDS model predictions with real refinery data obtained from an ARDS reactor.

Tang (6393367) discloses a method for determining the probability that a biological molecule identification is correct at a chosen significance level by comparing experimental mass data with theoretical data.

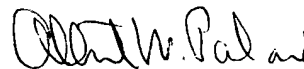
Art Unit: 2125

Nevruz (6463347) discloses a system for detecting the occurrence of an event where neural network models predict process behavior, comparing experimentally obtained data to the process predictions, and modifying the neural models to minimize the differences between the predicted and actual behavior.

4. Any inquiry concerning this communication or earlier communication from the examiner should be direct to Albert W. Paladini whose telephone number is (703) 308-2005. The examiner can normally be reached from 7:30 to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Leo P. Picard, can be reached on (703) 308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-4351

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Albert W. Paladini  
Primary Examiner  
Art Unit 2125

February 12, 2003